

SBR No. 119/16-17

DATED 15-9-16

EE/ELE/Y/BR.No. 115/16-17

DL 19-9-16

1st & Final bill

Original/Duplicate/Triplicate
CONTRACT CERTIFICATE
(For Other Works)

Date:

No.

Division: Electrical (yelahanka)

Sub- Division:

Bill Received No.....Dated.....Cash Book Voucher No.....dated.....

Scheduled Docket Name of Work (as per sanctioned estimate); Modified and change of Work for Construction of Electrical timer cables and powersaving arrangements with all accessories in Ward No 4

Contractor and Full Address: M/s Ramya Elctricals

Work Order No: : EE/YNK.D/E-Tend-05/W.O/167/2012-13 Dated : 30-11-2013

Revised Work order no : EE(ele)/YZ/RWO/17/2016-17 Dated -14-72016

Reference to Agreement Date

Job No:- 004-12-000052

P CODE - 2434

Certified that the measurements were taken by me on 15/9/16 and recorded of pages 310701 to 718 of Measurement Book No 3108/16-17 and that the work is satisfactorily executed.

Contractor

Officer in charge of work

Proprietor Certified that the measurements were taken by me on 15/9/16 and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in columns 3 of Account II have been actually brought to Site of the work and the contractor has not previously received any advance on this security. These materials are of an imperishable nature and are all required for immediate use on the work in the connection with item for finished work have been agreed upon. And normal agreement signed and executed by the contractor is recorded in the office.

Assistant Executive Engineer (Ele)
Sub-division Officer

II Memorandum of Payment

21) Total value of work done or supplies as per account within Bill = 19,04,548.00

22) Deduct amount to be held in reserve being percent Rs.....

23) " Balance IT 1% 19,045.00

24) Deduct payment : VAT 4% 76,182.00

i) Amount of previous payment as in the Office Cash Book FSD 5% 95,227.00

No.....Dated.....S.D.No.....

Amount adjusted towards cash advance recovery of hwc 1% 19,045.00

j) Payments cost store or other material supplied. CBF.01% 1,905.00

Now made recovery amount creditable to this/ other work deductions = 2,11,404.00

Amount paid on this bill cheque/cash cheque = 16,93,144.00

25) Balance being unpaid value of work done held in reserve

6) Deduct cash advance made on the Office Cash Book Voucher

No..... dated.....less adjustments

7) Net amount due to or from contractor

Unadjusted items

8) Advance to contractor for materials brought to site (as detailed) within Value of Government materials supplied

For Ramya Elctricals
Contractors Signature

Received Rs.....(in words)

by cash and adjustment of payment as per memorandum.

Witnesses : For Ramya Elctricals

1.

2.

Dated Signature of contractor

Paid by me by cheque No.....Dated

Cash Rs.....Dated

P. 2434 Development
19,04,548.00 (For use in the office)

16,93,144.00

2,11,404.00

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Sl. No	Description of Item	Unit
	Name of Work:- Modified and change of Work for Construction of Electrical timer cables and power saving arrangements with all accessories in Ward No 4	
1	Supplying High pressure sodium vapour street light fitting die cast aluminium canopy with aluminium housing for control gear, finished stove enamel gray glassy white canopy interior with a pair of anodized aluminium reflectors with toughened flat glass, gasket lining for drip insect resistance duly wired with porcelain holder copper choke, igniter and HPF condenser including a sodium vapour lamp.II 250 Watts) Group 'A'	Each
2	Supplying & fixing mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 or rail or RCC pole/wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires complete.b) Using 32mm dia G.I pipe	Each
3	Supply and fixing of cross arm including all Hardwares complete as per the standard technical specification.b) 2 Pin 45x45x5mm-510mm	Each
4	Supplying and Fixing..... including all Hardwares etc complete as per the Standard technical Specification. a) 1.1 KV Pin insulator	Each
	d) No.8 Strain Insulator	Each
5	Supplying and stringing of ACSR Conductor (6/2.59mm Al+1/2.59mm steel)	Mtr
6	Supplying and fixing including all Hardwares etc complete as per the standard technical specification e) RCC Clamp	Each
7	Fabricating supplying and mounting MS box made out... SWG suitable for floor/wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer pain and finally finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., completeb) 16 SWG	sqcm
8	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers etc., complete d) 100 Amps	Each
9	Supplying and fixing electro mechanical timer (without contactor) using necessary bolts, nuts and washers etc.,Group 'A' PWD SR 2007-08	Each
10	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' type curve, indicator ON/OFF, energy cross-3 with short circuit breaking capacity of 10K and Complete wiring as required. a) 5-32 Amps SP 1) Group 'A'.	Each
11	Supply and fixing of 4 pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947.d) 100-125 Amps	Each
12	Supplying and fixing angle iron frame work fabricated out of M.S angle iron... and M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. . (32.9a) a) 40x40x6mm	Rmtr
13	Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanized, steel wire/steel tap armoured cable with PVC outer sheathing 1.1KV ClassI. Class 'A' PVC Cable d) 4 core 16sqmm	per mtr
14	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe/ stoneware pipe/ on wall/ on pole as required.II. On wall /Structure a) 6 sqmm to 16sqmm	Rmtr
15	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes f) 16 sqmm	Each
16	Supplying and fixing Moulded Case Circuit Breaker (MCCB) Over the existing wood/panel board using necessary screws, bolts, nuts and wiring thermal Magnetci Microprocessed release and Earth Fault as per IS-13947. (Icu=Ics) THREE POLE a) 100 Amps 25 kA,2) Group 'B'	Each

Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty	Cost	Qty	Rate	Amount	Qty	Cost	
		65	6150.00	399750.00	65	399750.00	
		65	685.00	44525.00	65	44525.00	
		15	123.00	1845.00	15	1845.00	
		50	70.00	3500.00	50	3500.00	
		15	24.00	360.00	15	360.00	
		2485	19.80	49203.00	2485	49203.00	
		15	61.00	915.00	15	915.00	
		393750	0.33	129937.50	393750	129937.50	
		13	415.00	5395.00	13	5395.00	
		11	4200.00	46200.00	11	46200.00	
		11	195.00	2145.00	11	2145.00	
		10	7450.00	74500.00	10	74500.00	
		100	240.00	24000.00	100	24000.00	
		85	150.00	12750.00	85	12750.00	
		85	18.00	1530.00	85	1530.00	
		40	14.00	560.00	40	560.00	
		30	3460.00	103800.00	30	103800.00	

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17	Supplying.....amps rated 3 phase with neutral bus bar using requirement capacity electrolytic aluminium strips covered with heat shrinkable coloured PVC sleeve, mounted on phenolic/FRP/DMC insulator which are mounted on powder coated 40x6 mm M.S.flat frame work in existing panel board. The bus bar shall have suitable holes for termination of incoming and outgoing cables as per IS specification with necessary bolts, nuts and washers etc., complete.a) 100Amps 4x30x6mm Alluminium Strips	Rmtr
18	Supply and erection of mtr RCC pole including earth work etc., complete as per the standard technical specification.b) 9 Mtr 145Kg WL	Each
19	Supplying 70/125 Watts MH integral post top lantern Metal halide fitting suitable for pole mounted with fully vermin, weather proof, elegant in shpae, appearance, UV stabilized clear acrylic diffusers, camouflaged horizontal lamp, IP 54 protection. Electrical safety class 1. The fitting shall have ferromagnetic copper choke with capacitor, igniter and fully wired to operate on 230 V 50Hz AC supply with 70 /125 Watts MH Lamp..a) Group 'A'	Each
20	LT 3 phase 5 wire Aerial Bunched Cable of size 3X25+1X16+1X25+1X35 sqmm (Standard Stock materials 2010-11)	P/Mtr
	LT 1 phase 3 wire Aerial Bunched Cable of size 1X25+1X16+1X25 sqmm	P/Mtr
21	Striniging of 1.1 KV grade aerial bunched 3 core cable of XLPE insulation standard aluminium conductor standard around a weather resistant black XLPE insulated AAA messenger wire (3X 25 Sq mm + 1X 16 sqmm + 1X 25Sqmm + 1X 35 sqmm)	P/Mtr
22	Piercing connector suitable 16 Sqmm - 95 Sqmm AB cable service connections (Standard Stock materials 2010-11)	Nos
23	Dead End Clamp/ Anchor clamps assembly 25 to 95 sqmm bear messenger (Standard Stock materials 2010-11)	Nos
24	suspension clamp assembly 25 to 95 sqmm bear messenger (Standard Stock materials 2010-11)	Nos
25	Errection of suspension clamp 25 to 95 sqmm bear messenger (Labour charges 2010-11)	Nos
26	Errection of Anchor clamp 25 to 95 sqmm bear messenger (Labour charges 2010-11)	Nos
27	Istallation of insulation piercing connector for main to street light Main: 16 -95 sqmm,Tap: 1.5-10 sqmm (EP 95)	Nos
28	Digging of pits 1.5 mtr depth for errection of of 7.5/8 mtr Long steel/RCC/PSC/PCC supports Hard soil	Per Pit
29	Concrete Works Providing cement concrete to poles and guysets with material and labour including necessary curing etc., complete (cost does not include excavation) c) Providing coping for pole with CC1:2:4 (as per actuals)	Each
30	Errection of Poles : Releasing and Re-Errection of Steel supports 9.0 to 10.00 mtr long such as 22.68 kg (50 lbs) Rail, I beam of sizes 200 X 100 mm, 175X 90 mm , 125 X 100 mm, Fabricated poles, tubular poles in pits of 1.8 mtr Depth, aligning, refilling with soil For Errection =Rs 154.00 releasing of materials shall be 90 % of the cost of erection as per bescom circular BES/GM/(T)/BC-20/F-664/05-06/CYS 174 Dt:10.01.06. Therefore Releasing and Re-Errection = Rs 154.00+ 0.9X154.00=292.60	Nos
31	Street Light and other Works Releasing and Fixing of mercury Vapour lamp fitting /Ornamental light fitting with Control Boxes etc.For Fixing =Rs 224.00 releasing of materials shall be 90 % of the cost of erection as per bescom circular BES/GM/(T)/BC-20/F-664/05-06/CYS 174 Dt:10.01.06. Therefore Releasing and Fixing = Rs 224.00+ 0.9X224.00=292.60	Set
32	Hire Charges Components for Tractor 50 HP ,Sl no 20, Page No XXXIV, KPWD SR CIVIL 2010-11.Per Day Rs 2240.00	Day
33	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' type curve, indicator ON/OFF, energy cross-3 with short circuit breaking capacity of 10K and Complete wiring as required. c) 5-32 Amps DPI) Group 'A'	Each
34	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers etc., completeb) 32 Amps	Each
35	Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanized, steel wire/steel tap armoured cable with PVC outer sheathing 1.1KV ClassI. Class 'A' PVC Cable f) 3.5 core 35sqmm	per mtr
36	e) 3.5 core 25sqmm	per mtr

		25	1600.00	40000.00	25	40000.00	
		14	6583.00	92162.00	14	92162.00	
		0	5230.00	0.00	0	0.00	
		2982	81.45	242883.90	2982	242883.90	
		0	40.10	0.00	0	0.00	
		2982	8.96	26718.72 26721.70	2982	26718.72 26721.70	
		200	210.00	42000.00	200	42000.00	
		14	140.00	1960.00	14	1960.00	
		100	280.00	28000.00	100	28000.00	
		100	85.00	8500.00	100	8500.00	
		14	85.00	1190.00	14	1190.00	
		200	40.00	8000.00	200	8000.00	
		0	529.00	0.00	0	0.00	
		0	200.00	0.00	0	0.00	
		0	292.60	0.00	0	0.00	
		0	425.60	0.00	0	0.00	
		0	2240.00	0.00	0	0.00	
		80	510.00	40800.00	80	40800.00	
		80	100.00	8000.00	80	8000.00	
		296	250.00	74000.00	296	74000.00	
		56	215.00	12040.00	56	12040.00	

37	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe/ stoneware pipe/ on wall/ on pole as required.II. On wall /Structure b) 25 sqmm to 75 sqmm	Rmtr
38	Wiring for lighting/power circuit using one of PVC insulated 1100v grade, multis and Copper conductor single core cable in open or concealed system of wiring. I Group A Materials.c) 2.5 sqmm	mtr
39	d) 4 sqmm	mtr
40	Fabricating, supplying and erecting swaged tubular pole of height... Mtr having three sections and providing two coats of red oxide paint and finished with two coats of enameled paint of approved quality and colour and M.S. Base plate of suitable size welded at the bottom of the pole (as per IS) and 40 mm dia GI/flexible PVC pipe of 1 Mtr. Length fitted to the heavy gauge polycarbonate control box including 5 way connector of size 167x125x82mm for 7.5 M pole/ 200x160x98 mm for remaining length of pole with front opening cover, with locking arrangements and suitable capacity MCB/DP Switch. The pole shall be erected in cement concrete work(1:2:4) including excavation and refilling of planting depth of the pole to the ground level and the coping CC shall be upto 0.6M above ground level as per IS 2713-7.1. Erection of light duty pole on-Foot path a) 7.5 Mt (4.5Mt Hb 114.3mm dia 4.5mm thick x 1.5M Hm.88.9mm dia 4.50mm thick x 1.5M Ht. 76.1mm dia 3.25mm thick) as per IS 410 SP 5 (Base plate of size 300X300X6mm)-KPWD ELE SR 2007-08	Each
41	Supplying and fixing of Hot dip Galvanized M.S.Bracket suitable for out door luminaries and shall be mounted on Octagonal pole using necessary bolts, nuts, etc., complete.a) Single Arm Bracket with 1000mm Standard	Each
42	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25 mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class . a. 40 mm	Rmtr
43	Supply and Installation/Fixing /Provision for mounting of HRC Fuse /MCB with suitable connector/terminal for 3 Ph/1 Ph connections with Loop-in & Loop-Out terminals for 10 Sqmm/25 sqmm 3.5 C Al/AR/Cu/AR Cable and branchout 2.5 Sqmm 2 Core Al/Cu PVC insulated cable, enclosure, which should be shock proof, safe IP 65 (Weather Proof), rust proof, dust proof, water proof having Internally Embedded Gasket with provision for cable entry through IP 65 Thermoplastic, Polyamide glands and /or grommets.b) 260x210x116mm	Each
44	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete. (As per Civil SR KSRB 1-2, P-7)b. In hard Soil	Rmtr
45	d. Asphalt cutting	Rmtr
46	Supplying, fixing wiring earth electrode for grounding conduits. I.C.Cutouts and other equipments on the meter board using 40mm dia 2.90 thick GI 2.5 mtr long buried in a pit... the pit should be filled with equal proportion of salt and charcoal 150mm allround the pipe to complete depth. The connection from the pipe to the conduit etc, is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and checknuts etc, the pipe shall have 16 through holes of 12 mm dia.	Each
47	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc c. 25 Sqmm	Each
48	Supplying and Fixing 4 Nos of 590 mm length High Yield Tensile Cold Rolled Pitched threads (680 N/sq mm) 27 mm Bolt dia (Mkt Rate)	Nos
49	Hire Charges Components for Crane Charges , crane 80 tonnes Sl no 86, code no 1311, Page No XXXX, KPWD SR CIVIL 2012-13	hr
50	Material Components for Tractor 30 tonne capacity ,Sl no821, Page No XXIX, KPWD SR CIVIL 2012-13	hr
51	Releasing and Re-Fixing halogen/metal halide/SVL/IL floodlight fitting over existing pole/wall ceiling including clamps ,bolts ,nuts and wiring using suitable capacity wires complete i.e Rs=130.00 for fixing & 0.9 of Rs=130.0	Each
52	Supplying and drawing PVC flexible unarmoured copper control cable of approved make.E) 8c x 2.5Sqmm.1 Group A	Per mtr
53	Casting of suitable foundation for the 16/20 mtr High mast including designing and cost of all materials like Anchor plates,Template and washers labour charges, all other incidental charges etc., complete as per specification and Drawing given in KPWD elect SR 2010-11(P.No 107) Detailed Calculation as per CIVIL SR items Enclosed.	Each

		352	11.00	3872.00	352	3872.00	
		700	25.00	17500.00	700	17500.00	
		100	32.00	3200.00	100	3200.00	
		15	9000.00	135000.00	15	135000.00	
		15	1650.00	24750.00	15	24750.00	
		10	240.00	2400.00	10	2400.00	
		20	1570.00	31400.00	20	31400.00	
		40	50.00	2000.00	40	2000.00	
		10	80.00	800.00	10	800.00	
		2	1950.00	3900.00	2	3900.00	
		2	286.00	572.00	2	572.00	
		3	1350.00	4050.00	3	4050.00	
		12	866.00	10392.00	12	10392.00	
		4	1000.00	4000.00	4	4000.00	
		12	247.00	2964.00	12	2964.00	
		24	316.00	7584.00	24	7584.00	
		1	26914.00	26914.00	1	26914.00	

54	Supply and fixing of 70 Watts heavy duty open construction ferromagnetic copper ballast for HPSV/HPMH lampsd) 400 Watts1. Group A	Each
55	Supplying and fixing of HPMH lamps on existing fitting mounted on tubular polel) Single end d) 400 Watts	Each
56	Supplying and and fixing/replacement of ignitor suitable for 70 to 400 watts SV/MH fittings	Each
57	Material Components for Anchor Plates (IS 2062) Sl no 423, code no 0712, Page No XIV, KPWD SR CIVIL 2012-13	Each
58	LT 3 Phase ABC Cable of Size 3X95+1X16+1X70 Sqmm insulated Messenger	mtr
59	Piercing Connector suitable for 16 Sqmm- 95 Sqmm, AB cable Street light Connection	No
60	Piercing Connector suitable for 16 Sqmm-95 Sqmm, ABC cable Service Connection	No
61	Universal Hook Bolt, nut etc.,	No
62	RCC pole clamp-(154mmx95 clamps) to fix the universal hook	No
63	Dead end clamp/Anchor clamps assembly	No
64	Suspension Clamp assembly	No
65	Pre-insulated Lugs CPTAU for 95 sqmm for transformer connection	No
66	Bare to LV ABC connector -Type :-CDR/CN IS 95UK	No
67	Cable Straight thru' joint kits suitable for 95 Sq mm	No
68	End cap for 50/70 Sqmm	No
69	16/25 Sqmm Aluminium Lead wires.10Mtrs/pole	No
70	Stringing LT 3 Phase ABC Cable of Size 3X95+1X16+1X70 Sqmm insulated Messenger	mtr
71	Installation of Piercing Connector suitable for 16 Sqmm- 95 Sqmm, AB cable Street light Connection	No
72	Installation of Piercing Connector suitable for 16 Sqmm-95 Sqmm, ABC cable Service Connection	No
73	Installation of Piercing Connector suitable for 25Sqmm-95 Sqmm, ABC cable Service Connection(main to main for phase cable	No
74	Fixing of Universal Hook Bolt, nut etc.,	No
75	Fixing of RCC pole clamp-(154mmx95 clamps) to fix the universal hook	No
76	Fixing of Deadend clamp/Anchor clamps assembly	No
77	Fixing of Suspension Clamp assembly	No
78	Installation of Bare to LV ABC connector -Type :-CDR/CN IS 95UK	No
79	Installation of Straight joint(Full Tension) suitable for 70 Sqmm,LT,AB cable -MJPT Type	No
80	Releasing and Refixing of Service mains SR page No 10 Rs 25 Per connection	No
81	Releasing of Pin Insulator	No
Total Rs		

TP - 3% (Below)

Certificate: 1. The Above said Work has been carried out satisfactorily
2. Amount claimed in this bill has not been claimed any of the previous bill


Assistant Executive Engineer (Ele)
BBMP, Bangalore

		3	1680.00	5040.00	3	5040.00	
		6	1152.00	6912.00	6	6912.00	
		6	520.00	3120.00	6	3120.00	
		2	705.00	1410.00	2	1410.00	
		350	292.27	102294.50	350	102294.50	
		10	152.00	1520.00	10	1520.00	
		45	217.00	9765.00	45	9765.00	
		10	289.00	2890.00	10	2890.00	
		10	280.00	2800.00	10	2800.00	
		4	145.00	580.00	4	580.00	
		4	289.00	1156.00	4	1156.00	
		3	360.00	1080.00	3	1080.00	
		6	360.00	2160.00	6	2160.00	
		3	310.00	930.00	3	930.00	
		2	19.00	38.00	2	38.00	
		20	20.00	400.00	20	400.00	
		350	10.75	3762.50	350	3762.50	
		10	48.00	480.00	10	480.00	
		45	68.00	3060.00	45	3060.00	
		4	57.00	228.00	4	228.00	
		10	102.00	1020.00	10	1020.00	
		10	39.00	390.00	10	390.00	
		4	136.00	544.00	4	544.00	
		4	102.00	408.00	4	408.00	
		6	118.00	708.00	6	708.00	
		3	113.00	339.00	3	339.00	
		45	30.00	1350.00	45	1350.00	
		12	50.00	600.00	12	600.00	
				1963456.10		1963456.10	

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